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## symposia

february, 1973

CONSTRUCTIONS AZAGE CONSTRUCTIONS SPECIFICATIONS INSTITUTE 8THE ANNUAL REGION 10 CONFERENCE FEBRUARY 8-10, 1973

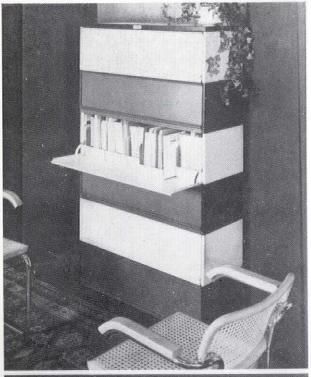
**T-370...** the concrete bond breaker for stack casting concrete and tilt-up slabs that will also cure the concrete. It disappears, leaving the concrete in its initial surface condition, thus permitting the application of a finish coat.

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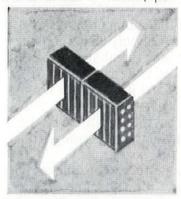
Supreme makes the file cabinet you never outgrow. ThinLine is the only office cabinet that's modular. The only one that grows from two tiers to as high and wide as you'll ever need. ThinLine costs less not because it's made cheaply, but because it's made better. It was engineered from the start to be the best budget file cabinet available. No complicated drawer assemblies. No wasted space. And yet it functions perfectly for high-activity office filing including top tab filing. ThinLine functions as a small office file and as a system for major installations. See the Supreme ThinLine Conserv-a-file soon in Seal's showrooms at 80 South Santa Fe. Supreme is one of many distinguished makers proudly displayed by Seal.



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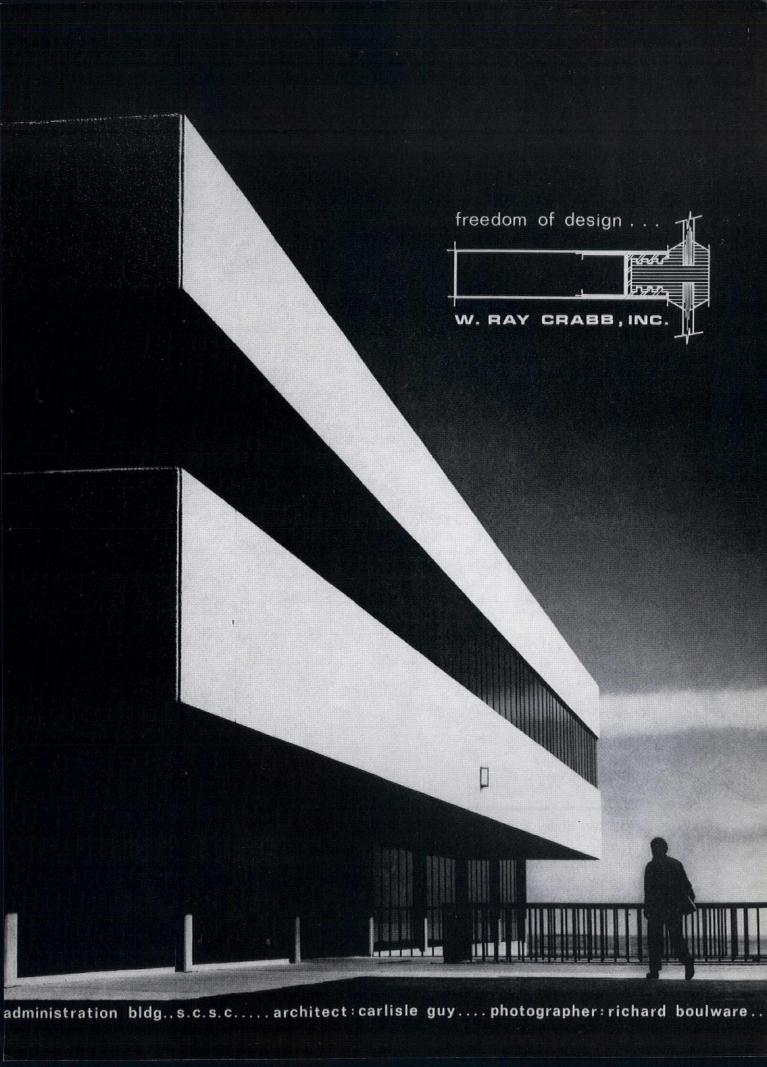
Furthermore, since it enables heat to be recovered and re-used, the heat pipe conserves precious natural gas. And in these days of tight energy supplies, that's a mighty important consideration.

We have complete information on heat pipes, their operation, benefits, and sources of supply. It's all yours. Just call Fred Wehrle or Gene Martin collect at 303/473-2300.



## Heat pipe. The energy saver.

Recommended Reading: "Meeting National Energy Needs". Send \$4.00 postpaid to the Chamber of Commerce of the United States, Washington, D. C. 20006. Quantity Discounts Available.



### symposia

#### construction communications in the West

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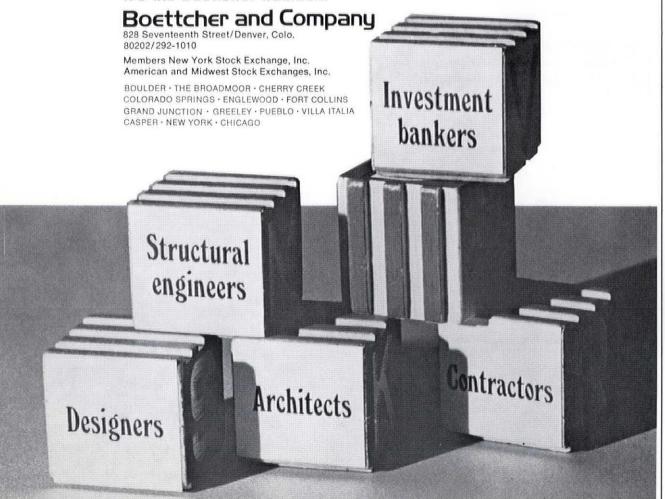
School bond issues? We can organize the bond campaign and when the election is over, structure a re-payment schedule in keeping with the school district's financial position, thus providing you funds for the project.

Colleges, universities, and hospitals? We act as financial consultants and bring them together with the potential investors.

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critique

(Since Symposia means an exchange of ideas—we provide this column for the bouquets and bulldozers—a chance to talk it over with your colleagues in the architecture/engineering/construction community. The welcome mat is out—address Symposia at 4070 Estes Street, Wheat Ridge, Colorado 80033)

In taking a look at policy decision for Symposia for 1973, Dear Fletch and Betty: I wonder if you would consider the following:

Include the name of the general contractor on all buildings illustrated in Symposia.

If Symposia is to be a unifying force of architecture/engineering/and construction, one of the ways of effectively accomplishing this would seem to be an editorial policy which thinks in terms of all the phases of construction. For example, in listing the 1972 Honor Awards Program of the Western Mountain Region, it would be of great interest to your contractor readers to have listed in addition to the architect who designed the building, the contractor who built it. This is similarly true of any of the other articles which you carry and which illustrate buildings. It is one thing to design a building, but if it stays on paper and is never constructed it merely becomes an architect's piece of show and tell for prospective clients. If it is built, it becomes a lasting display of the arcihtect's, engineer's and contractor's abilities to meet the owners needs.

We hope also in 1973 to have a more regular input from AGC/C of activities in the Construction Industry. We look forward to continuing working with you.

Donald W. Decker, Executive Director Cordially, Associated General Contractors of Colorado

Certainly Don's suggestion is a valid one. Therefore, good Building Chapter, Inc. friends and neighbors, when you send your buildings to brighten our Symposia mail box and our pages, will you include the name of the General Contractor AND the names of any consultants used in your planning. We do indeed, hope to serve all the industry, but we will need your help to do so. Thank you, Don, for making this good suggestion . . . we'll endeavor to follow through!

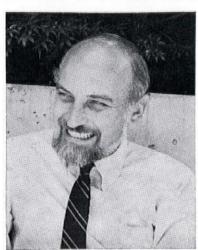
I'm not much for writing fan letters, but I can't suppress a warm impulse to commend you on your newsy and in-Dear Mrs. Trunk: formative mag. But, more than that, it's a fun magazine. Even your "Old Indian". No frustrated writers, your architectural correspondents. They are writers! and not dreary nor dull ones.

Keep having fun! Sincerely yours,

William Arild Johnson, Architect Everett, Washington

What a wonderful way to start our new year—our thanks to Architect Johnson for obeying that impulse! And you are so right—Symposia is as much fun as a barrel of monkeys (see December's cover).

#### Peters in Portland



Those of us fortunate enough to meet and hear Professor Richard C. Peters last October at the Western Mountain Region/AIA Conference can promise their friends in Oregon a rare treat when Dick comes to call this month. Professor Peters will be the principal speaker at the joint dinner meeting on February 21 sponsored by the Oregon Section of the Illuminating Engineering Society, and the Portland Chapters of the American Institute of Architects and American Institute of Interior Designers.

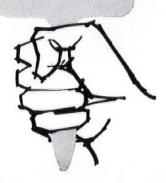
Professor Peters is Chairman of the School of Architecture at the University of California in Berkeley and has a national reputation as a lighting consultant. On sabbatical in 1968, he studied the relationship of natural and artificial lighting in the built environment with particular emphasis on this integration in the works of Alvar Aalto with whom he met at that time. His most recent work includes the University of California Art Museum at Berkeley, the University of Santa Barbara Faculty Club and the Yerba Buena Convention Center street lighting proposal. The title of Professor Peters' presentation in Portland will be "Lighting for Architectural Enhancement".

A delightful person and an ingratiating speaker, Professor Peters has spoken before on this subject . . . last May, he addressed the Northwest Regional Meeting of I.E.S. in Banff Springs, Alberta, and his auditors found it immensely informative and inspirational. This is, indeed, a fine opportunity and we know the IES/AIA/AID dinner meeting on February 21 will be well worth your attention.

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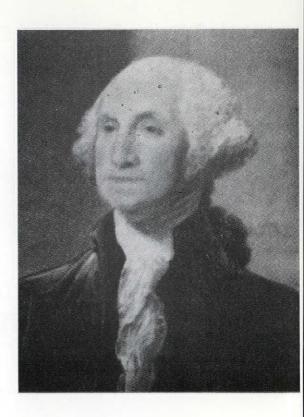
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## whatever happened to george?

You remember George!
The guy in the quote—"Let George
Do It." He's still around . . . you
may not believe this, the last time
we looked, he was wearing a Royal
Purple Hard Hat.
No kidding!



You'll find him on construction sites all over Colorado installing the "guts" of the building—the mechanical system that's gotta work—and for a long time.

The thoroughly-trained, competent United Association plumber or pipefitter is an important man on anybody's building team.

So is his reliable employer.

You can count on this George—circa 1973.

He'll get your job done right.

The first time!

So . . .

now you know what happened to George!



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JENN-AIR introduces America's most advanced ranges...





Convertible cooktop - Simply lift out Cooktop Cartridges to convert your Jenn-Air range to a single or twin Char-Flavor Grill . . . in seconds!

Proximity ventilation-No overhead hood needed. Built-in system ducts cooking odors and soil quietly . . . outdoors!

Now... a stay clean oven- Surface grilling takes broiling out of the oven to eliminate this major source of soil and splatter. Oven power-vented to outdoors... cleans while you bake!



DELUXE CONVERTIBLE "CERAMIC-GLASS" MODEL 3890 ERS

(Specify "Free-Standing" or "Drop-In".)

U.S. & Foreign Patents, and Patents Pending

The elegant look of a decorator-styled white glass-ceramic cooktop combined with Jenn-Air's exclusive *proximity-ventilation* system! Smooth top styling adds beauty to any decor . . . easy to clean too! Either cooktop cartridge "lifts out" to let you convert your Deluxe range to a Savory Centre with Bar-B-Q grill and other accessories . . . in just seconds! Each cartridge has two heating areas . . . permit you to use both glass and metal utensils that you now own (they should have smooth bottoms). Rugged heating elements within the cooktop cartridges never require cleaning.

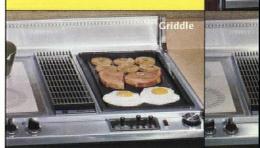
All controls are in front—so you never reach over steaming pans to select a control setting you wish! (See page 6 for additional features.)

- The most flexible, benefit-packed cooking appliance ever designed—it makes cooking fun again!
- Exclusive convertible Glass-Ceramic cooktop cartridges "wipe clean" for care-free maintenance.
- Cartridges allow easy conversion to Bar-B-Q grill and other accessories.
- "No Hood" Proximity-Ventilation keeps your kitchen clean and fresh
- Power-vented Continuous Cleaning Oven—ducts baking odors and excess heat . . . outdoors!

Your choice of Glasor conventional element cartridges that "lift out" to co Jenn-Air range to a twin Bar-B-Q grill.

#### ACCESSORIES

These optional accessories team up with your Jenn-Air range to open a whole new world of fun, flavor and cooking flexibility. Simply "lift-out" the cooktop cartridge (one or both sides) and add accessories in seconds...to make your Savory Centre the most versatile appliance in your kitchen.



#### Continuous cleaning oven with power-venting!

From the beginning . . . your new ove stays far freer from oven soil—since mea preparation (broiling and rotissing) is now more flavorfully prepared on the optiona surface grill or rotisserie. The specia continuous cleaning catylitic oven coatin speeds oxidation of normal oven soil while you bake. The more you bake, the faster these minor stains disappear!

Power-venting sends baking odors and excess heat . . . outdoors—to let you bak on the hottest day!

The oven, a full 20 inches deep, holds the largest roaster pan with a 22 pound turker or a 20 pound roast. Oven also has top broil element for browning foods, top broiling stuffed lobster, etc. Four race positions, 2-way broiler pan included.

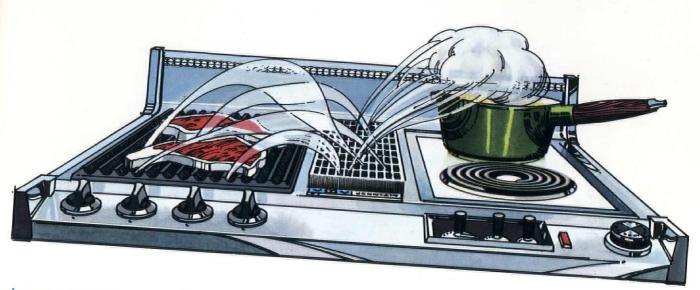
Clock-control automatically starts an stops baking even while you shop. Als features a 60 minute electric interval time and automatic interior oven light.

Decorator-styled opaque black glass ove door panel.

#### All Savory Centres available as built-ins!!!

Savory Centres may be ordered as "drop-in" model for installation in your cabinetry. "Years ahead" features wi protect the value of your new or remodeled kitchen for years to come!

## an exciting new adventure in indoor freshness...outdoor flavor!



## Jenn-Air's "years ahead" proximity venting provides dramatic improvement over conventional hood exhaust systems

Eliminates the hood forever! Cooking odors, smoke and fumes are pulled down into the surface air-exhaust grille—and ducted outdoors. No overhead hood needed—ever!

More effective ventilation! Has nine times greater capture velocity at the cooking surface than a ducted hood of the same power located 36 inches over the range!

Quieter! Because the exhaust system is enclosed within the range there's no annoying ear-level hood noise to distract conversation.

Easier to clean! A permanent "lift-out filter" is washable in sink or dishwasher. No overhead hood surfaces to collect greases and gummy residues.

More Sanitary! Eliminates possibility of condensate drippage from cool hood surfaces onto the cooking area below.

#### Jenn-Air's exclusive Char-Flavor™ broiling

Your Jenn-Air Savory Centre charbroils steaks, hotdogs, fish or fowl, faster than an outdoor grill—and without the fuss. 2800 watts of clean, radiant heat duplicates the action of charcoal—vaporizes meat juices as they strike the permanent flavor-rock cartridges below. The smoke and vapors created bathe the meat with true charbroiled "outdoor" flavor. Then the surface ventilation system quietly whisks these fumes outdoors before they can escape into your home. This great "outdoor" flavor is created in the same manner on the rotisserie and shish kebab accessories.

A more attractive and "fun" way to prepare foods for every meal, party, or midnight snack!

Eliminates oven fumes, too! Power-vented oven sends smoke and heavy odor from baking, roasting or top-browning . . . outdoors.

Keeps your kitchen cleaner . . . fresher! Captures greasy cooking vapor before it can settle on walls, appliances, draperies—dramatically reduces undesirable kitchen humidity and cooking odors!

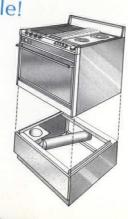
Greater kitchen design flexibility! Ideal for island and peninsula installations—eliminates the expense and obstruction of an overhead hood.

Keeps you fresher while you cook! Pulls steam and odors down, away from the person cooking—not toward them!

Five year warranty on ventilation power-pack! See "Use & Care" Manual for complete warranty information.

## Ventilated base makes ducting simple!

All Jenn-Air Savory Centres and ranges are ducted outdoors. Installation is similar to ducting an ordinary clothes dryer—and may be accomplished from virtually any desirable location within the home. Free-standing models are ducted through the base section of the range.



Other exciting new ranges and Savory Centres by Jenn-Air give you the same cooking flexibility... but without convertible cooktop feature.

#### 30" Deluxe Range/Grill/Oven Combination

A complete cooking centre featuring two hi-speed electric heating elements—plus a permanent built-in Char-Flavor grill that gives you the flexibility to utilize all the other Savory Centre accessories! (The non-stick griddle accessory may also be used with ordinary utensils to give four-element cooking capacity, if required!)

Combines Jenn-Air's popular Char-Flavor Broiling with the exclusive built-in proximity-ventilation system that exhausts fumes and odors from everything you cook . . . outdoors! Continuous Cleaning Catylitic oven has adjustable power-venting to send smoke and fumes from baking or top-broiling . . . outdoors. The same ovens and deluxe features as in our deluxe convertible cooktop models!

Other deluxe model features include: Decorator-styled opaque black glass oven door, electric convenience outlet with circuit breaker, automatic oven light, indicator lights for both surface cooking and oven operation, fan switch and infinite controls. Order Model 2860 EGS (Specify "Free-Standing" or "Drop-In" Model)

#### 30" Custom Range/Grill/Oven Combination

Same quality and specifications as the deluxe model above, but with brushed-satin finish oven door and less the automatic clock control, timer, and oven top-broil feature. Includes complete Char-Flavor grill accessory, has Continuous Clean oven with adjustable power-venting and all other features of the deluxe model. Order Model 2855 EGS (Specify "Free-Standing" or "Drop-In" Model)

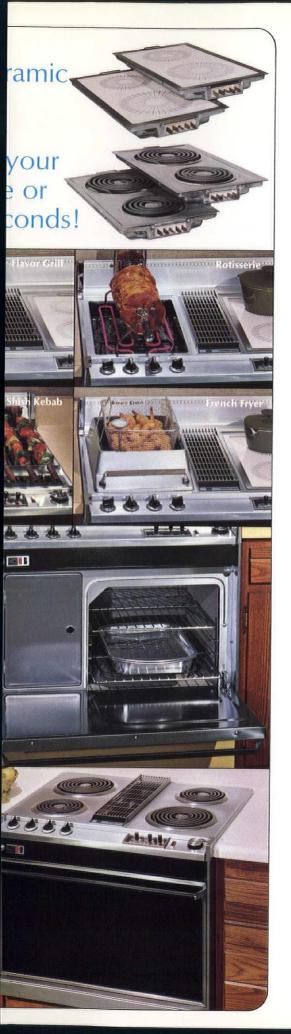




An exclusive combination of features, convenience and performance you'll find in no other range (except our Savory Centres!). Has the same features as our Deluxe and Custom Ranges—but without the built-in cooktop grill or convertible cooktop features.

Featuring Jenn-Air's exclusive "No Hood" proximity-ventilation system that exhausts smoke and odors from everything you cook, bake or oven broil . . . outdoors! Power-vented oven with space-age catylitic coating permits "closed-door broiling"—in a kitchen that stays fresh as Springtime!

Decorator-styled for classic beauty—it has every feature you've ever wanted in a range! 20" deep oven—large enough for your biggest roaster pan, attractive black opaque glass oven door panel, clock-controlled baking to let you "start" and "stop" baking automatically, electric interval timer, automatic oven interior light, indicator lights for surface and oven elements, infinite controls are "up front" where you never have to reach over steaming pans to "up front" where you never have to reach over steaming pans to reach them, electric convenience outlet with circuit breaker, permanent washable air filter, ventilation system switch, and more Order Model 2810 ERS (Specify "Free-Standing" or "Drop-In" Model)





"CONVENTIONAL ELEMENT" MODEL 3875 ERS
(Specify "Free-Standing" or "Drop-in")

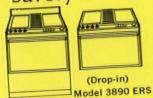
The same great features as our glass-ceramic top range—but with "lift-out" conventional element cartridges! Each of the two cartridges "lift out" to let you easily convert your Jenn-Air Range to a single or twin grill (and other accessories) in just seconds!

Beautiful satin-finish cartridges are 2-element ranges in cartridge form—you merely "plug-in" to the hidden terminal—and they're fully connected to the infinite controls. Controls are up front, too—so there's no reaching over steaming pans! (See page 6 for additional features.)

- The same flexibility and benefits offered by our deluxe glassceramic Savory Centre!
- Includes Conventional Element Cooktop Cartridges—for easy conversion to single or twin Bar-B-Q grill . . . and other accessories.
- Four element cooking convenience (when accessories not in use).
- "No Hood" Proximity Ventilation
- Power-vented Continuous Cleaning Oven—ducts baking odors and excess heat . . . outdoors!

#### **Specifications**

#### "Glass-Ceramic" Deluxe Convertible 30" Savory Centre



(Free-Standing)

This beautiful and flexible four-element Glass-Ceramic range features Jenn-Air's exclusive "lift-out" cartridges which allow you to utilize all of Jenn-Air's cooktop accessories.

Savory Centres offer Proximity-ventilation for all food preparation. Continuous Cleaning oven is power-vented to exhaust baking and broiling smoke and odors outdoors.

and odors outdoors.

Other deluxe features include: Decorator-styled opaque black glass oven door panel; clock controlled baking; 60-minute electric interval timer; electric convenience outlet with circuit breaker; indicator lights for cooktop and oven operation; adjustable oven power-venting; automatic oven light; infinite controls for all surface cooking and accessory operation; fan switch. Order Model 3890 ERS (Specify "Free-standing" or "Drop-in")

#### "CONVENTIONAL ELEMENT" DELUXE CONVERTIBLE 30" SAVORY CENTRE



Exactly the same quality and specification as our Deluxe Convertible, but with four conventional heating elements mounted in two "lift-out" cooktop in the conventional heating the convention of the convention o cartridges.

#### OTHER JENN-AIR RANGE/GRILL/OVEN COMBINATIONS

These models give you the same cooking flexibility but without the convertible cooktop fea-

#### 30" DELUXE RANGE/GRILL/OVEN COMBINATION



A complete cooking center featuring two hi-speed electric heating elements—plus a permanent Char-Flavor grill that gives you the flexibility to utilize all the other Savory Centre accessories! Has all other

features and specifications of Deluxe Convertible Savory Centre (model 3875 ERS) above. Order Model 2860 EGS (Specify Free-Standing or Drop-in Model)

#### 30" CUSTOM RANGE/GRILL/OVEN COMBINATION

Same feature and specifications as the deluxe model 2860 EGS above, except with brushed satinfinish oven door and less the automatic clock control, timer, and oven top-broil element. Order Model 2855 EGS (Specify Free-Standing or Drop-in Model) For complete description see catalogs #10-250 and 10-250.

#### JENN-AIR'S DELUXE FOUR ELEMENT 30" RANGE;

Has the same features as our Deluxe Model 2860 EGS above—but with 4 heating elements and without the built-in cooktop grill. Order Model 2810 ERS. (Specify "Free-Standing" or "Drop-in" Model) For complete description see catalog #10-259.

#### Savory Centre Accessories

#### Grill-Model 87851

(For Convertible Cooktop Models 3890 ERS and 3875 ERS only)

Includes two permanent grill-roc flavor cartridges, plug-in char-flavor broil element and black anodized aluminum cooking grates. Fits either side of "Convertible" Savory Centre Models 3875–90 only. Grill accessory is required for operation of all other accessories! (Order two kits if you intend to use two grills or accessories at one time.)

#### Rotisserie-Model 86436

Enjoy the great char-broiled flavor of rotissed foods with this two-level rotisserie unit. Consists of chrome finish motor, brackets and skewer. 120

#### Shish Kebab-Model 86473

Makes parties more fun—midnight snacks more flavorful. Consists of four gear-driven stainless steel skewers, two brackets. (Use with rotisserie

#### Griddle-Model 87708

Family sized 180 sq. in. surface has permanent non-stick finish you can use with metal spatulas.

#### French Fryer-Model 86732

Attractive heavy-duty cast aluminum—ideal for hors d'oeuvres, chicken, shrimp, french fries, soups,

#### Cutting Board Cover-Model 8069

Attractive laminated hardwood cutting board fits snugly over any Jenn-Air Grill section—gives you additional countertop work area when grill is not

#### Bifold Grill Cover-Model 86631

Bright anodized aluminum. Folds over grill in two hinged sections to provide additional counter area when grill not in use.

#### Dimensions/ Installation Data

#### Total connected load

(Maximum-each model)

Models 3890 ERS . . . 11.35kw 3875 ERS . . . 11.35kw Model 2860 EGS . . . 10.8 kw Model 2855 EGS . . . 9.8 kw Model 2810 ERS . . . 11.35kw

(All models 240 volt—may be ordered 208 volt)

#### All free-standing models

Overall dimensions: 29%" W x 261/4" D x 36" H (nominal)

#### All drop-in models

Top overall: 29%" W x 241%" D x 231%" H Countertop Cutout: 28%" W x 221/4" D\* Cabinet Front Cut-out: 30" W x 231/4" H (to top of counter)\*

Interior oven dimensions: 20" D x 16" W x 13" H

\*See recommended installation instructions before cutting countertop.

NOTE: Free-standing models may be converted to built-in units without cost simply by removal of base, side-panels and backsplash.

Your Drop-in or Free-Standing Jenn-Air Range is easily ducted to the outdoors directly through an outside wall or through the basement or crawl space beneath your home. Installation is similar to ducting an automatic clothes dryer—and utilizes ordinary 5", 6" or 3½" x 10" duct. A matching exterior wall cap should be ordered from Jenn-Air to complete the installation. For recommended duct lengths, sizes and arrangements see Specification Sheet 10-206 or installation instructions for the model you select.

Range top (except on convertible glass-ceramic models) is brushed satin-chrome finish—with black accent control panel. Free-standing models feature por-celain side panels and base of neutral Champagne with standard base color as illustrated. Backsplash is of satin-finish extruded aluminum with accent strip.

NOTE: Ask your Jenn-Air Dealer for literature on Jenn-Air's complete line of countertop ranges and grills . . . eye-

The Jenn-Air Corporation is the largest manufacturer of Ventilated built-in ranges and grills. Many Models and combinations are available, including single Char-Flavor grills that install in as little as 18" of countertop width.



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Printed in U.S.A. Specifications subject to change without notice. See installation instructions for current specifications. See current price sheets for complete warranty information. © 1972, Jenn Air Corporation

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#### "I Will Fight No More—Forever"

Chief Joseph



#### THE MOMENT OF TRUTH

One of the most agonizing experiences which an architect periodically experiences is the opening of construction bids. It is so breathtaking that it compares to the matador with red muleta spread, facing the charging bull for the final tercio, the kill—known as the moment of truth.

It is the moment of truth for the architect, because he has assured his client after a year of sweat and toil, plus many battles and resulting scars, the project is a reality and it will be within the budget. The plans and specifications have been in the hands of the contractors for several weeks and after many sleepless nights, the moment of truth, when the bids are opened by the client and the architect, is at hand. The project is either a reality or it

is just a bad dream—to be further compromised or just plain forgotten.

Architectural practices are not built upon unused and faded blueprints. The architect's reputation is based upon constructed projects, not on beautiful drawings laying unused in the tracing file. Then, too, it is much easier to collect your fee if the project is a reality, not an unbuilt dream.

It can also mean considerable loss of time and money a year of effort lost, and a reputation injured because of an inability to meet a budget. On future projects, if there are any after this fiasco, his credibility will be challenged because the word gets around rather rapidly that he doesn't comprehend the realities of life.

Meeting construction project budgets is similar to playing the stock market. The architect must anticipate at least a year in advance in his estimates, the condition of the construction market at the bid date, and it can vary considerably dependent upon the work load of contractors and the economic condition of the area. An architect often feels like telling his client, "If you can guess the Dow-Jones stock market average one year from the date of preliminary plan approval, I'll guarantee the cost of your completed project". In either case the guesses are pure gambles; but for the architect it is more than the rise and fall of the stock market—his professional reputation is at stake.

What advice does an old timer who has missed his share of budgets advocate to the neophyte architect? Retain a professional estimator to check your project construction costs at each design step, and if you can't afford such service, learn to take off quantities and keep current unit costs. Along with such knowledge acquire the wisdom of a soothsayer to thus be able to prophecise months in advance the economic condition of the region and the nation.

H. Robert Wilmsen, F.A.I.A.



intermountain specialty equipment co., inc.

furniture, equipment and interior development systems



## A rchitectural I daho A wards

1972 Design Awards Jury

Victor Langhart, Denver — Chairman James Harris, Tacoma Robert Frasca, Portland

HONOR AWARD

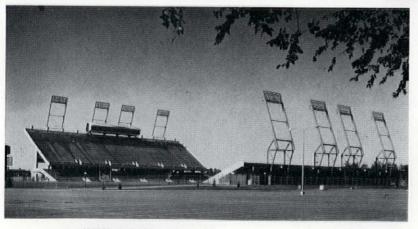
Vacation House — McCall, Idaho

Architects: Hummel, Hummel, Jones and Shawver
Partner in Charge: Nedd Jones

Photography: Jeremiah O. Bragstad

The Jury: "An almost perfect solution to the Owner's program requirements for a 'fun place' and a place to display the owner's 'kooky things' that humanize. This is a people place."





MERIT AWARD

Boise State College Stadium — Boise, Idaho
Architects: Adams/Price Associates
Photography: Jeremiah O. Bragstad

The Jury: "This stadium is an excellent expression of the Owner's needs, and imaginatively and creatively done as a sculptural form."

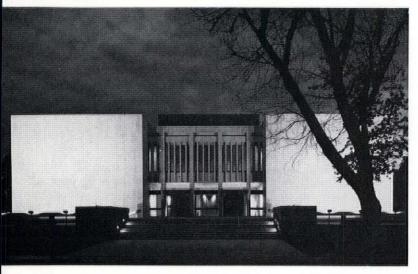
MERIT AWARD

Stanley A. Young Residence — McCall, Idaho Architects: Hummel, Hummel, Jones and Shawver Partner in Charge: Nelson Miller Photography: Jeremiah O. Bragstad

The Jury: "This residence is well sited and we commend the simple use of material. The plan is clear and direct. On the whole, this is a very conscientious piece of architecture."

The 1972 Design Awards Program of the Idaho Chapter/American Institute of Architects drew to its triumphant conclusion on December 8th with a gala banquet at the Royal Motor Inn in Boise. There were over seventy members and guests assembled to meet the new Idaho Chapter officers for 1973 and to applaud out-going President Charles G. Bartell as he was presented the President's Medal. The speaker for the evening was the Chairman of the Design Awards Jury, Mr. Victor Langhart of the Rogers/Nagel/Langhart firm, Denver, Colorado. The climax, of course, was the presentation of the 1972 Awards for the projects pictured here . . . and a handsome group indeed. We would add Symposia laurels to the honors already conferred.

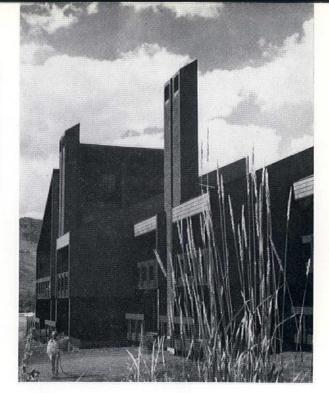




The Jury: "This design contains a ull range of assets. The plan is simble and direct. The expression is nonumental and appropriate to its ise. Excellent detail, especially in the interior, along with good use of materials and colors are to be compended."



The Jury: "This project seems like a good, honest, direct solution to a very complex program. The jury felt that the plan had been well organized and, functionally, it was well expressed in the exterior masses, which had an overall sense of unity, scale and interest.



CITATION

Condominium Complex — Ketchum, Idaho
Architects: CTA Architects/Engineers/Planners

The Jury: "Good exterior masses with consistent and careful detailing. Good functional planning. It was evident much care was given to the design."



Symposia/February, 1973

#### THE ENERGY CRISIS

#### A Conservation Seminar Sponsored by Producers' Council

(During the past several months, concerned members of Producers' Council have sponsored a large number of meetings throughout the nation to alert the Construction Industry to the very real threat posed by energy shortages. And for the first time, the "crunch" became really apparent in Denver. Originally scheduled for November 1 — the Energy Conservation Seminar sponsored by Denver's P.C. was cancelled because of a howling blizzard. Finally held on December 7 - much of the area west of the Rockies was in the grip of Old Man Winter's icy tentacles. Before the eleven days of sub-freezing temperatures ended, everybody knew that the Energy Crisis was not just around the corner - it was here! Commercial users of natural gas converted to alternative energy, but as these sources dwindled and all but disappeared, workers were laid off and plants put on a stand-by capacity. In chilly January - came the real bite when even Denver's school kids got an "extra" vacation while administrators scrambled for sufficient fuel. What many regarded previously as a future problem became today's grim reality.

Symposia is pleased to have the opportunity to present here the Keynote speech delivered at the December 7 Energy Conservation Seminar by Dr. James C. Bresse, Assistant Director, General Energy Development, Division of Appeal Technology of the Atomic Energy Commission. This represents the first in a series of articles on a topic of vital importance to

#### Dr. Bressee's Keynote Address

Thank you for asking us to participate in your energy conservation seminar to make a few remarks about energy problems facing the United States.

Let me begin by identifying the particular energy problem I will discuss. Our major challenge today is to continue the production of energy in the various forms required by our economy at reasonable prices, using for the most part domestic resources with a minimum adverse impact on the environment.

Some might suggest that since the U.S., as the richest nation on earth, can afford to buy fuels overseas, we should use theirs and save ours. Arguably, that is trueblue American conservation. But what can we afford in the fuel market? The National Petroleum Council estimates that we will import during 1985 a little more than 30 quadrillion Btu's of oil and eight quadrillion Btu's of gas. In more familiar units, that is more than five billion barrels of oil and 10 trillion cubic feet of gas. At current domestic prices at the wellhead, the value of such overseas purchases would exceed 20 billion dollars. But to give an indication of more realistic future costs, the first largescale delivery of liquified natural gas from Algeria (at a rate of a billion cubic feet per day) was estimated recently to cost 80c per million Btu, rather than today's 20-30c. Some claim crude oil costs may approach \$5/Bbl. by the middle eighties. In that case the \$20 billion mentioned earlier would reach \$40 billion.

Today, balance of payments deficits of only a few billions of dollars per year cause much concern. Can we realistically expect our overseas sales in 1985 to support a

\$20-40 billion purchase of oil and natural gas? Most experts doubt it. And when national defense considerations are added to the hazard of political pressures generated by such an economic deficiency, it is obvious why there is currently a great interest in developing new domestic energy resources.

In 1971 the Atomic Energy Commission was authorized by Congress to broaden its areas of technical interest to include all sources of energy. Light water power reactors may be said to have arrived economically, although perhaps still circling the field ecologically. The same can be said of Gulf General Atomic's gas cooled reactor. The fast breeder program is making rapid progress, with a large demonstration power plant scheduled in the late seventies. All three types of reactors have benefited from vigorous industrial participation as well as long-term strong governmental research and development efforts. Similar programs will be required for the development of alternate energy sources.

At the outset, let me say that there is a need today to make sufficient and effective use of all our energy resources. Nuclear fuels are expected to supplement, not supplant, the fossil fuels in meeting our expanding energy needs. We in the AEC have been stressing this point for many years. U.S. energy requirements are growing at a rate of three to four percent a year. Fossil fuels currently supply about 96 percent of our primary energy. They will continue to be the principal source of energy for the balance of this century; even though nuclear energy will be supplying an increasing fraction. It is estimated by the Federal Power Commission that by 1990 about 40 percent of the total electrical generating capacity will be nuclear.

The consumption of electricity is growing twice as fast as all other energy uses, at present at a rate of seven percent annually. By the next century, electricity will probably become the dominant form of energy use. During the 1960's, annual consumption of residential electricity rose from 200 to 450 billion kilowatt hours. This represents an increase of 125 percent.

Residential use accounts for about 20 percent of the total energy consumed in the U.S. Four applications — space heating, water heating, cooking and refrigeration — account for over 80 percent of the energy used in American households. Two residential uses of energy — air conditioning and clothes drying — increased significantly during the past ten years but still account for only a small portion of the total energy consumed. Further large increases can be expected in the future, however. These data indicate the importance of energy consumption in residential structures and I will return to this subject in a few moments. However, in my discussion today I will be emphasizing the development of non-nuclear energy sources which programs within the AEC are under my direction.

Let us review briefly the possible new energy resources. Fusion power, the controlled burning of heavy hydrogen, is one strong possibility. Since it is a type of nuclear energy, the AEC has been working in the field for many years. There is much optimism today about ultimate success, but we must remember that the first successful experiment — the fusion equivalent of the Stagg Field event of 1942 — has yet to be accomplished. More than twenty years were required to travel from the University of Chicago demonstration of fission reactor feasibility to commercial power, and many see the fusion road to be much more tortuous. Fusion probably cannot be expected to affect the energy problem I am discussing today before the year two thousand.

Solar energy - directly tapping the giant fusion reactor we call the sun - has been touted by many as a potential replacement for most other energy sources. It has been described as environmentally innocuous and essentially free. Solar energy appears to have attractive possibilities in the near-term for the heating and cooling of small buildings; this could reduce the need for oil and gas imports. However, a careful look will identify several problems awaiting answers before large scale production of electricity from solar energy can be achieved. First, the source is dilute and cyclic. A 1000 MWe power plant would require several square miles of desert for a collection field, plus a heat or electricity storage facility to bridge the hours of darkness. Second, coated pipes or solar cells are expensive and may not yet have sufficient reliability to provide decades of service. Finally, in considering the construction of central station solar power plants there tends to be a natural geographical mismatch of people and deserts, with the bulk of the U.S. population and industry concentrated in areas which have prolonged cloudy periods. The AEC's solar energy program is beginning quite modestly, influenced by the probability that solar energy economics and uncertain technology will limit central station solar power application until towards the end of this century - about the time it is thought that fusion power might also become available.

On the other hand, geothermal energy is a present-day economic reality, although at small scale. The steam fields at Sonoma, California, are being used to generate 192 MWe by the Pacific Gas and Electric Company. Union Oil Company has made commitments to PG&E for delivery of steam for annual increases of 100 MWe to a currently planned level of 1000 MWe capacity. In the Imperial Valley in California, several industrial and governmental programs are presently seeking commercial energy from hot springs, with strong probabilities of success.

The problem is one of scale. Even geothermal optimists doubt that the natural hydrothermal sources will exceed 50,000 MWe. Since literally several millions of megawatts will probably be required before the end of this century, geothermal energy might be destined to play a significant but small role in the future. One exciting promise is hot, dry rock.

Underlying much of the West and some of the East are granitic intrusions considerably hotter than the average rock at the same depths. If the hot rock is penetrated and broken by hydraulic fracturing, pressurized water could be recirculated from the hole to a heat exchanger on the surface. A secondary heat transfer fluid such as ammonia could drive a turbine to produce electricity. Finally, if the returning cooler water were to cause additional cracking — as is expected — then the power levels could be maintained or even increased. In essence, an artificial hot spring would be created — from which energy could be removed for perhaps as long as thirty or forty years.

A test of this concept is planned at the AEC's Los Alamos Scientific Laboratory in New Mexico. If power extracted from hot, dry rock were to be successful and economically attractive, the potential electricity production could be as much as one-third of the U.S. requirements in 1990.

Finally, the AEC has a strong interest in synthetic fuels from coal. Excluding nuclear fuels and as yet unproven substitutes such as hot, dry geothermal sources, coal represents the largest energy resource in the U.S. and the world. You may recall that our current annual energy consumption is some 70 quadrillion Btu's and that by 1985 we may be consuming 125 quadrillion. Our total known coal reserves are some 83,000 quadrillion Btu! Clearly a supply sufficient for hundreds of years' use is potentially available.

On the other hand, coal is becoming increasingly unusable as environmental factors militate against it. Strip mining, which produces more than half our coal, is under sharp attack. Direct use of eastern coals, which contain more than one percent sulfur, will be sharply limited if strict SO<sub>2</sub> emission standards proposed in some states are enforced. Even low sulfur western coals produce environmental problems as evidenced by particulate emission at the Four Corners plants.

Happily, gasification and liquefaction processes eliminate most of these problems. Sulfur is easily reduced to acceptable levels during the manufacture of synthetic fuels from coal, and can be collected and stored in a form convenient for industrial use; this contrasts with the probable inadequacy of stack gas cleanup methods proposed to date. Synthetic gas and liquid can be burned to produce essentially no smoke, as can their natural counterparts. Finally, synthetic gas and synthetic liquid industries could alleviate our balance of payments problems, and

probably at prices which approximate the import prices expected in the nineteen-eighties.

There remain the serious environmental problems associated with coal mining and conversion processes themselves. The AEC is exploring a coal gasification process which offers some relief to those areas also — the underground conversion of coal to useful gas (the so-called in situ gasification process). The AEC concept, being explored by the Lawrence Livermore Laboratory of the University of California, differs from earlier attempts at underground gasification. The approach, most applicable to deep thick seams in Wyoming, involves preliminary fragmentation of a coal formation by chemical explosives followed by down-flow chemical reaction with oxygen and steam.

Hopefully, much of the gas produced will be sulfur-free methane but external process equipment can convert residual carbon monoxide and hydrogen to clean methane by proven methods. Since current mining methods are not economical at depths greater than 500 feet and most coal is deeper, the process offers a method of expanding economic coal reserves with minimal environmental penalties. However, one environmental problem that remains will be gradual land subsidence as the coal is converted, and this will need to be carefully investigated.

Finally, pipeline quality gas (methane) and liquid fuels are much cheaper to transport than coal, either by train or by slurry pipeline. Thus, in the future western coal may be converted to synthetic fuels before transport to population centers. High sulfur eastern coals may be liquified to produce boiler feed for power plants and other liquid fuels. In view of these possibilities the AEC is also beginning an investigation of coal liquefaction processes.

One additional AEC activity relating to fossil fuels deserves mention here. We are hopeful that our Plowshare program can be successfully applied to stimulation of natural gas production from the deep, low permeability formations in the Rocky Mountain area. Studies underway since 1965 have shown this to be a promising application for nuclear explosions. And, in experiments carried out in 1967 (Gasbuggy in New Mexico) and 1969 (Rulison in Colorado), we have demonstrated the basic technical feasibility of stimulating the production of natural gas in this way.

We are now actively involved in planning for a further experiment, called Rio Blanco, to further develop this technology. Rio Blanco is planned for next spring in western Colorado. It will be the first such experiment to use the simultaneous detonation of several nuclear explosives.

Additional experiments, especially to develop nuclear explosives capable of withstanding sequential detonation, are needed and planned for future years. Of course, there are also economic and many non-technical factors which will have to be successfully resolved before this technology can be put to use on the wide scale necessary to make a substantial contribution to ease the natural gas shortage. However, the recovery of hydrocarbons without visible disturbances of the surface, which this technology achieves, may make it more environmentally acceptable than many people initially think.

Let us consider now the role that energy conservation may play in solving our energy dilemma. Conservation of energy resources can be approached in a number of ways

but two factors stand out — (1) increased efficiency of conversion, and (2) reduction of losses.

Light water nuclear power reactors have an efficiency for electricity production of some 32 percent, while modern coal-fired steam plants may exceed 40 percent. The gap is referred to as nuclear thermal pollution. On the other hand, the high temperature gas-cooled reactor has an efficiency more like that of a modern fossil plant. And the fast breeder reactor, the long-term mainstay of the nuclear power program, will be even better. Thus, a trend toward more efficiency in the production of nuclear electricity will be seen, a trend certainly to be encouraged.

Fossil-fueled plants will be with us for many years, even though we may see a shift from direct use of coal, petroleum, and natural gas to synthetic fuels during the next two decades. The AEC is seeking to improve their efficiencies also. A potassium topping cycle, in which potassium vapor is produced by the highest temperatures of the fossil furnace before steam production, may allow achievement of an electricity generation efficiency of 50 percent. Such a cycle is under study at the AEC's Oak Ridge National Laboratory under the sponsorship of the National Science Foundation. The AEC is examining other topping cycles to determine their applicability to improving efficiencies. If such increased efficiencies can be attained, they would decrease our fuel consumption for electricity generation by at least 25 percent. Many other conservation approaches can also be mentioned, such as the use of less energy-intensive materials. However, time will not permit discussion of all of these.

Finally, we come to insulation to reduce heat losses. It is clear from many studies that much waste can be eliminated in space heating, particularly of private homes. And since natural gas is used in so many instances for private home heating, for which it is probably the fuel of choice, such reduced waste should directly benefit our balance of payments.

As I indicated previously, residential use accounts for about 20 percent of the total energy consumed in the U.S. The National Mineral Wool Insulation Association, in an April 1972 report, estimated that a reasonably attainable energy saving by 1982 might amount to 1.5 quadrillion Btu's, if private home construction and improvements used adequate insulation. Gas imports in that same period might total six quadrillion Btu. The prospect of cutting gas imports by 25 percent is exciting indeed. We are ignoring, of course, space heating by other than gas, which with increasing use of heat pumps may be quite significant.

Another way to measure the impact of a savings of 1.5 quadrillion Btu's is to consider the synthetic fuel plants it would eliminate. A minimum practical coal gasification plant would produce 250,000,000 cubic feet of gas per day and require 6,000,000 tons/year of bituminous coal. 1.5 quadrillion Btu's of synthetic gas would require approximately 15 of such plants, at a total capital investment of nearly \$5 billion.

Since the Mineral Wool report showed an approximately two-year pay out time for the cost of the improved insulation for private homes, it is obvious that conservation practices of the kind you will be discussing are very valuable. We commend you for your efforts and wish you every success. I promise that we in the Atomic Energy Commission will do all we can to assist you.

officially speaking....

# CONSTRUCTIONS CONSTRUCTIONS CONSTRUCTIONS SPECIFICATIONS INSTITUTE 8THM ANNUAL REGION 10 CONFERENCE FEBRUARY 8-10, 1973

Region 10 Conference Albuquerque, New Mexico



A Welcome Relief



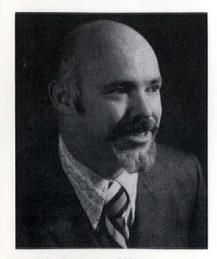
R. James Noone Region 10 Director

In a spirit of respite, we welcome you to the C.S.I. Region 10 Conference. February 8-10 in Albuquerque just has to be better than the climate in many other parts of our Region. It could be an excuse for attending . . . but it's not the best reason.

Our design and construction industry can foretell the increasing importance of the Construction Management concept in the future. However, opportunities to learn about it from experienced personnel are scarce. This conference will provide all of us with a better background that will affect our subsequent work.

The program planned by the CSI Albuquerque Chapter is truly an efficient one for the attendees. Business and informational activities are grouped for concentration; recreational activities are provided at complementary times to assure your enjoyment of the whole conference experience. So welcome to Albuquerque, Learn a lot and. . . . Enjoy! Enjoy!

HONORED GUESTS: All of Region 10 will welcome the opportunity to meet and greet the personable gentlemen from the "higher echelons" of the Institute this February in Albuquerque. Mr. Petterson will moderate the Saturday morning Workshop on Technical Documents — Herman Hoyer is that very Important Vice President in charge of Liaison and Tom Keeton is just Tom — and where would C.S.I. be without him!



Robert L. Petterson, FCSI Chairman/Technical Documents



Herman R. Hoyer, FCSI Institute Vice-President



Thomas W. Keeton, Jr. Southwest Section Director

#### The Official Program

ALL HONOR AND GLORY

Yes, indeed, laurels are in order for these fellows who have given "above and beyond" to make this Conference memorable. Huzzah for *The Home Team* 



George Chant Conference Chairman



Robert J. Schmidt, FCSI Conference Co-Chairman



Stan Borthwick The Ladies Man

At the time of registration, each member will be requested to designate the Workshop they wish to attend on Saturday morning. The Ladies Tour to Santa Fe will depart from the Four Seasons at 9:00 a.m. on Friday morning. Please meet in the Lobby.

What

When

## THURSDAY, FEBRUARY 8 4:00- 6:00 PM Registration Lobby 5:00- 6:00 PM Chapter Presidents and Vice Presidents Meeting. No substitutions, all those attending must hold either

all those attending must hold either of the above offices.

6:30- 7:30 PM Cocktails Pool and Court Area

Where

7:30 PM Free evening — directions will be furnished to a no-host eating establishment of the specialty conferees may choose.

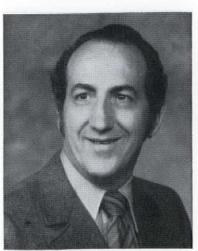
#### FRIDAY, FEBRUARY 9

- 7:30- 8:30 AM Symposia Editorial Board Break- To be announced fast (Board Members only)

  8:30- 9:00 AM Registration Lobby

  9:00-10:05 AM Opening Ceremonies/Chap. Reports Directors Room
- 10:05-10:20 AM Coffee Break
  10:20-11:20 AM Institute Reports Directors Room
  Region Director Jim Noone

Section Director Tom Keeton Institute Vice President Herman Hoyer Institute Director Joe Gascoigne

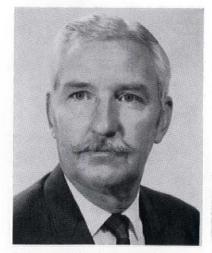


Gordon Bosl, President Albuquerque Chapter

#### KEY TO MAP

- 1: Lobby
- 2: Gift Shop
- 3: Beauty Shop
- 4: Directors Room
- 5: Coffee Shop
- 6: Dining Room
- 7: Bar and Lounge
- 8: Ballroom/Meeting Rooms
- 9: Elevator and Stairs to Parlors
- 10: Pool and Court
- 11: Rooms
- 12: Parking

#### ON METRICATION



Professor Richard H. Clough New Mexico University

#### CONSTRUCTION MANAGEMENT and VALUE ENGINEERING



Anthony E. Mansueto



A. J. Dell'Isola

When What Where

> "METRICATION" Directors Room

Professor Richard H. Clough University of New Mexico

NOON: Lunch

11:20-NOON

1:30- 5:30 PM CONSTRUCTION MANAGEMENT Directors Room

VALUE ENGINEERING

Anthony E. Mansueto and A. J.

Dell'Isola of McKee-Berger-Mansueto, Inc.

7:00- 8:00 PM Cocktails Pool and Court Area

8:00- 9:00 PM Banquet Ballroom

9:00 PM Awards Presentation/Speaker

#### SATURDAY, FEBRUARY 10

9:00-10:00 AM Concurrent Workshops Parlors

Moderating:

Technical: Robert L. Petterson, FCSI Membership: Joseph A. Gascoigne

Awards: Terry J. Strong

10:00-10:30 AM Summary of Workshops Directors Room

10:30-10:50 AM Coffee Break

Region 10 Business Meeting Directors Room

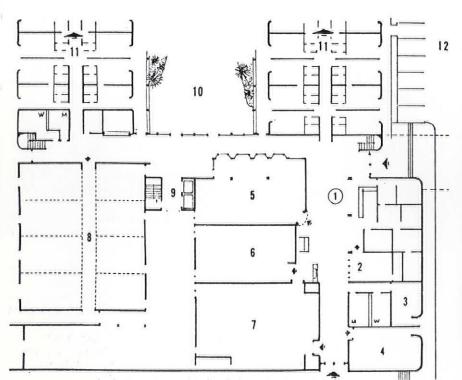
10:50-11:30 AM 11:30-NOON

Region 10 Forum Directors Room

Adjournment

12:30 PM Luncheon with the Ladies Ballroom

The Parlors are located on the second floor just over the Coffee Shop and can be reached by either elevator or stairs in the Alcove between the Coffee Shop and Ballroom (9).





## 1973 Exhibition of School Architecture at the Annual Conventions American Association of School Administrators Portfolio I

It has become our happy custom over the past few years to salute the American Association of School Administrators at their Annual Convention time. This salvo also honors the architects whose educational facilities within Symposia territory have been selected for the Exhibition jointly sponsored by the American Institute of Architects and the AASA. This year — both Convention and Exhibit become plural with events taking place at Atlantic City on February 24-28, and in San Francisco March 17-21.

The very simple criteria are for regular entries limited to instructional and administrative facilities for public, private and parochial schools at all levels including the 14th grade and for such facilities as Colleges of Education. Renovations and additions are also eligible. Projects must have been completed since January 1, 1970 or must be under contract for construction on or before September 1, 1972. Projects may be submitted by all registered architects (eligibility not limited to AIA members) or by landscape architects.

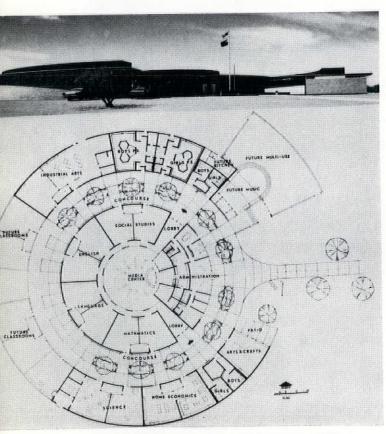
In addition to the certificates issued to all entrants whose projects are selected by the Jury for exhibition, citations are usually made calling attention to outstanding features of individual projects. In 1973 — special awards instituted in the names of two of the organizers of this outstanding Exhibition will be made. The Shirley

Cooper Award will be granted to the project judged most outstanding for educational environment — the Walter Taylor Award will be granted to the project most outstanding for architectural design.

We are, as always, most grateful to Beatrix Sebastian, Director of the Architectural Exhibition, for her kindness and cooperation and to the many architectural firms who have so promptly supplied us with graphics and information on their projects. Thank you — one and all!

Because of the number of projects chosen for the exhibit — a second group will appear in Portfolio II in our March issue.

#### JUNIOR HIGH SCHOOL \* SAHUARITA, ARIZONA SUPERINTENDENT: PAUL S. FRICK



Page 28 Symposia/February, 1973

#### ARCHITECTS: MASCARELLA/MERRY AND ASSOCIATES TUCSON, ARIZONA

This particular district encompasses a geographically large, sparsely populated area but when the first school was built in the late fifties remarkable foresight was shown in acquiring an 80 acre site. With two existing buildings—one housing K-8 students, the other a High School, it became increasingly apparent that the junior high program needed space and adequate specialized areas. Designed for 425 (expandable to 575) seventh and eighth grade students, Sahuarita Junior High was built at a cost of \$24.19 per square foot.

The modified open concept establishes the media center as the focus for the general academic area with pairs of classrooms divided at the center with operable walls and the circular arrangement affords equal access to the media center. The outer ring contains the specialized study areas. An inherent problem of the circular shape is difficulty of expansion solved here by surrounding the circle with a ring. This creates a concourse providing protection from frequent winds and landscaped seating height planters.

Highly collapsible native soils called for a structure supported on a grade beam and caisson foundation and mechanical systems were selected for the simplest of maintenance requirements for a district without trained equipment engineers on the staff. Windows in the tan, over-sized brick building were minimized because of higher cost, to reduce air conditioning loads, as a deterrent to vandalism in this remote area and because of difficulty in projection and other visual aids.



#### Devry Institute of Technology \* Phoenix, Arizona George Doherty, President/Bell & Howell Schools Donn Carter, Vice-President/School Facilities

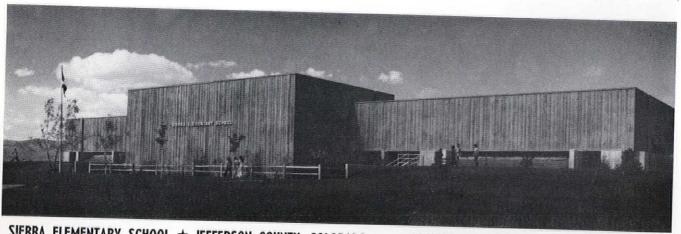
One of a series of institutes of electronics engineering technology offering accredited degree courses to high school graduates, De Vry was designed to allow frequent reprogramming of spaces to meet changes in class size and curriculum. The school also had to be convertible to some other function in case it outgrew the building and had to move to a new one.

The Arizona site, climate and local construction methods suggested a two story building surrounding an open courtyard with balconies and an open corridor flanking the court for major circulation. These are pulled back into the overall building envelope providing much needed

## ARCHITECTS: CAUDILL ROWLETT SCOTT NEW YORK CITY CONSTRUCTION MANAGER: KITCHELL CONTRACTORS PHOENIX, ARIZONA

shade. The interiors are mainly open, loft-type spaces with two skylift utility cores the only fixed elements. The combined use of systems-building, fast-track scheduling and construction management made it possible to move into this school nine months from the start of the design. The DeVry Institute was built at a cost of \$19.22 per square foot, accommodates 2,000 students (in two shifts with a peak of 1,200) on a 8.5 acre site.

The monumental open stair and landing dominates the court which is the large group assembly area for the school . . . at an opening party a rock group used the landing as a stage with considerable success.



SIERRA ELEMENTARY SCHOOL \* JEFFERSON COUNTY, COLORADO SUPERINTENDENT: ALTON W. COWAN

The design solution at Sierra is concerned primarily with the student and his environmental relationship, but has also included the concept of teacher-aid. Interest and practical use has been obtained by relating the building forms to "child scale" and three types of spaces — "closed", "closed-flexible" and "open" permit the Principal and staff to fit the building to their educational program. The instruction is interdisciplinary throughout the school requiring space for instruction for the smallest group (1) and the largest group (150) with space for discussion groups (2-15).

Concrete is the principal building material with high exterior walls having a very rough textured finish, trim-

### ARCHITECTS: ROGERS, NAGEL, LANGHART DENVER, COLORADO GENERAL CONTRACTOR: TITAN CONSTRUCTION

med with smooth concrete at the top, bottom and corners. The interior of the concrete walls is covered with panels of vinyl covered insulating material in all areas except Gymnasium where panels of "cork carpet" covered plywood over insulation were used. Floors are carpeted in Academic, Music and Administration areas; with vinyl asbestos tile in the Kindergarten, Art, Seminars, Labs and Gymnasium with ceramic tile used in toilets and quarry tile in the kitchen areas. Sierra was constructed on a 9.8 acre site to accommodate 626 students. The low per square foot cost — \$18.27 — is excellent and the time of construction from contracts to completion was less than a year.



AGAT and MONG MONG ELEMENTARY SCHOOLS \* AGAT, GUAM SUPERINTENDENT: CLARK JEWELL ARCHITECTS: MacKINLAY/WINNACKER/McNEIL AIA & ASSOCIATES

AKCHITECTS: MACKINLAT/WINNACKEK/MCNEIL AIA & ASSOCIATES OAKLAND, CALIFORNIA — HONOLULU, HAWAII — AGANA, GUAM ENGINEERS: STRUCTURAL: JORDAN, CASPER, WOODMAN

MECHANICAL and ELECTRICAL: MONTEATH/KRUMHOLZ & ASSOCIATES

GENERAL CONTRACTOR: BLACK CONSTRUCTION COMPANY

PHOTOGRAPHY: PORTER G. WEAVER

Last year we visited schools in Alaska — a provocative experience. In 1973, the environment is very different . . . the design of two elementary schools on the tropical island of Guam. Using common design elements adaptable to two different sites, the average cost was \$18.33 per square foot and the average number of students, 675 (K-6).

At one site with many existing large trees, there was a phased replacement of an existing non-typhoon proof school in a village center. The other site was new, carved out of the jungle, on a ridge surrounded by marshland.

The buildings must be designed to withstand 155 mph typhoon winds and use the natural ventilation of the prevailing winds. Guam is in Seismic Zone 3.

The solution consists of two and three story dual-class-room pods, single story kindergarten wings, a dining hall used as a community multipurpose room, future library and administration wings. The plan is a version of the more traditional finger plan school. The classroom rectangles (long side to the wind) have their ends cut off on an angle to avoid the long awkward shape which would occur if two classrooms were put together end to end. This arrangement allows for open plan team teaching while still providing good natural ventilation and gives the schools their distinctive form.

The buildings are constructed of concrete and concrete masonry units (coral aggregate is material native to Guam). The floor and roofs are poured in place concrete; CMU bearing walls.



#### OAKWOOD ELEMENTARY SCHOOL \* PRESTON, IDAHO SUPERINTENDENT: DR. ORSON L. BOWLER

The Design Team for Oakwood — a consolidated rural elementary school (K-5) includes the principals of the firm: Eugene Haycook, AIA; E. Jay Christopherson, LAEP and Anthony A. Wegener, ARAIA. With a capacity of 750 students, the building on a 20 acre site is not intended to physically expand. The initial population may be expanded to a maximum of 900 without appreciably diminishing the student ratio of 1/67.67 square feet.

Neither traditional or totally open, the elementary school has been designed with a "middle of the road" approach. Each classroom cluster contains approximately 125 students in four groups, but with five major teaching areas in each pod (two are enclosed), teacher and team have the flexibility to be innovative with plan and program.

ARCHITECTS: ARCHITECTURAL DESIGN WEST, INC. LOGAN, UTAH

Spaces between pods and 11 foot halls create additional alcoves and alternate group areas.

As in most rural areas, the building is community oriented with multi-purpose gym, lunchroom and kitchen open to the public for community use — an overhead aluminum gate divides these areas from academic spaces.

The architects faced with the "Cadillac at Ford prices routine" accomplished their goal with a remarkable \$14.32/square foot cost with the economical structural system. All electric and totally air conditioned, carpeting on floors and walls controls sound, and solid oak is used extensively. Color is the school's immediate impact with coordinated earthy autumn carpeting complimented by the oak paneling.

Meeting future educational needs and programs was foremost here with consideration for the use of computers, data processing, audio-visual techniques, television, tape recording and other electronic techniques . . . perhaps currently too costly or impractical but with provision for future use. Teaching spaces were provided for all group sizes, flexibility and change is achieved by open plan techniques. Special requirements included a theater with full size stage with fly gallery, backup workroom, dressing rooms and drama classroom for the strong and vital drama program; a large gymnasium with spectator seating for 1600 (partly on folding bleachers) and a full size swimming pool which is open to the public when not in use by the school.

The site is a sloping 25 acres with a 35 foot elevation difference, making a three story building with grade level access to each floor desirable. This saved ground space and accommodated physically handicapped students. Most suburban high school sites are much larger and the saving in land costs provided complete landscaping including grass, trees and sprinkler system. Another unique economy was leaving many walls unpainted to offer a neutral background for hanging art . . . the savings realized being used to purchase over 500 reproductions of paintings, of masters old and modern.

Corridors were designed as galleries with alcoves, recesses of different sizes provided for clusters of lockers. All heavily used areas have quarry tile floors of a pecan color. Instructional and library areas are carpeted.

The minimum student body is 1600 with a space allocation of 133 square feet per student. The cost of Heritage High School — with all its amenities — \$19.80 per square foot.

## GOODING HIGH SCHOOL \* GOODING, IDAHO SUPERINTENDENT: JAMES V. MUSCAT ARCHITECTS: C T A ARCHITECTS/ENGINEERS/PLANNERS TWIN FALLS, IDAHO . . . BILLINGS, MONTANA

Architect R. Edmond Peterson's statement for Gooding High School located on a 34 acre site is as follows:

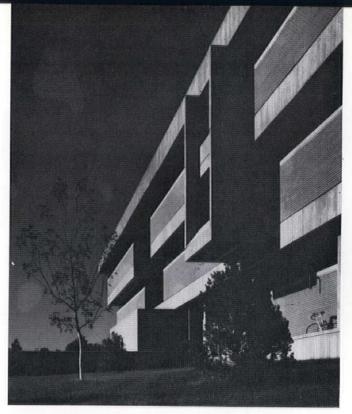
The program called for a 400 student high school, grades 9 through 12, to be constructed on a two level site next to the existing football field.

The decision was made to locate the building on the upper plateau of the site with auto parking on the lower level so the view to the school was over top of the cars and up to the building.

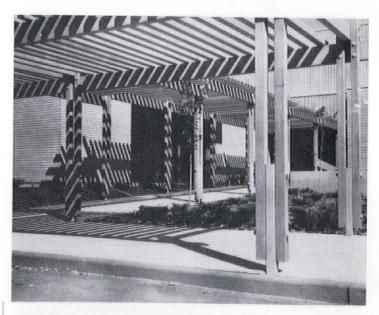
The building is frame and brick veneer with Trus-Joist and steel truss roof structure. There is 61,597 square feet contained in the building with 20 teaching stations, Total construction cost, including onsite improvements was \$1,338,974.00 (\$21.70 per square foot).

With the fast changing trends in education today it was our desire to design this facility with enough flexibility so it will still meet the needs of the district 20 years from now. The academic areas in the building are grouped around the Materials Resource Center. There are two four classroom pods that can be used for open, team teaching or can be closed and used in the traditional four separate classroom concept.

The program called for an auditorium but the budget



HERITAGE HIGH SCHOOL \* LITTLETON, COLORADO
SUPERINTENDENT: KENNETH P. SCHOONOVER
ARCHITECTS: EUGENE D. STERNBERG AND ASSOCIATES
LITTLETON, COLORADO
GENERAL CONTRACTOR: ROB ROY CONSTRUCTION COMPANY
PHOTOGRAPHY: TED EDEEN



wouldn't allow it so as a compromise we designed a Multi-Use space which has raised, fixed seating to seat the student body, a stage and space in the middle that could be used as a cafeteria, study hall, dance floor or seating for community functions to accommodate 700.

The school has full physical education facilities with folding bleachers that will seat 2,000 spectators.

A photograph of the exterior of Gooding High School may be seen in our coverage of the Idaho AIA Design Awards in this issue. Gooding received a Citation in this program.



PUNAHOU SCHOOL BISHOP HALL \* HONOLULU, HAWAII

PRESIDENT: RODERICK McPHEE

ARCHITECTS: ERNEST H. HARA AND ASSOCIATES, INC.

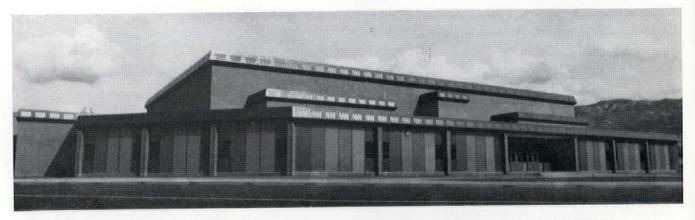
HONOLULU, HAWAII

PHOTOGRAPHY: AUGIE SALBOSA

Bishop Hall replaces a deteriorating structure dating from 1901, accommodates 700 seventh and eighth grade students and provides a library-learning center for a total of 1,200 (5-8). In almost every case, the walls between the 26 classrooms are "operable" so two or more rooms combine for larger spaces.

The heart of the building is the Learning Center housing a wide variety of media providing encouragement for students to learn "on their own". The site terminates a grouping of classrooms known collectively as the "Junior School" and is situated advantageously on a grassy knoll which slopes down on three sides overlooking the Lower Campus and connected by walkways on the fourth side to the existing complex. It enjoys prime orientation, favorable to climatical conditions, view and linkage to existing circulation patterns.

Learning environment was of prime importance. Air conditioning provides temperature control and freedom from outside noises. There is a garden courtyard, a plastic tapa design wall covering and a mosaic tile wall in the Learning Center and careful thought was given to plantings, both within and without the building. Cast-stone fascia panels and grills comprise the exterior revetement; lava rock retaining walls and wood trellises relate to much of the existing character.



WOODS CROSS HIGH SCHOOL ★ WOODS CROSS, UTAH SUPERINTENDENT: BERNELL WRIGLEY DIRECTOR BUILDINGS AND GROUNDS: DEWAYNE D. JAY ARCHITECT: HAROLD K. BEECHER, AIA

The challenge of design at Woods Cross was the development of flexible, 1800 student three-year high school adaptable to future educational programs in four construction phases over a period of about eight years. The First Phase includes Administration Offices, Gymnasium, Media Center, and Cafeteria sized for their ultimate use with instructional spaces for only 700 students. Flexibility of spaces is achieved by operable walls, demountable partitions and folding partitions have a sound transmission class of 38. Gymnasium, Auditorium and Cafeteria may be divided into smaller spaces through electrically

STRUCTURAL ENGINEER: RALPH L. WADSWORTH
MECHANICAL ENGINEER: HESS AND BENNION
ELECTRICAL ENGINEER: FREDERICK G. KIDSTON
GENERAL CONTRACTOR: ACORD & HARRIS CONSTRUCTION
PHOTOGRAPHY: HAL RUMEL

operable walls, and the Media Center as the hub is located in the midst of the classroom pods, accessible from six converging corridors.

The compact integration of spaces was inspired by the necessity for economy which produced interior areas with controlled auditory, visual and thermal environments.

Located on 38 acres of rolling farmland, Woods Cross High School, Phase One, was constructed at \$27.17 per square foot with an estimated cost of \$26.30 per square foot for the completed school.

#### a symposia series Introducing: architecture engineering/construction leaders

#### new mexico



Van Dorn Hooker, President New Mexico Society American Institute of Architects

It is always a pleasure to find Van among the "fearless leaders" — a spot he seems to occupy with frequency and elan. Not so very long ago, for instance, he spent two years as the Gavel Man for the Albuquerque Chapter, and has done an extended stint in other capacities in both his home-town and on the N.M. Society scene.

A native of Texas — his architectural degree is from the University, and after working in offices in Dallas and Austin, he did graduate study under Eric Mendelshohn at the University of California at Berkeley. Van and his wife, Peggy (also a University of Texas graduate and a registered architect) came to New Mexico to make their home in 1951. Initially, he worked for Meem, Zehner and Holien in Santa Fe, and five years later opened offices with John W. McHugh — a firm which later became McHugh, Hooker and Kidder (and those are certainly familiar names to Symposia readers.)

In 1964, Mr. H. joined the University of New Mexico in Albuquerque as University Architect and Director of Campus Planning which enrolled him as a member of the Association of University Architects, and has kept him mighty busy for almost a decade . . . growth at U.N.M. has certainly burgeoned during his tenure.

The Hookers are the parents of three children — pretty well grown up now, and of course, share many interests.

A quiet and unassuming gentleman, Van Dorn Hooker will keep a firm hand on the throttle in the year ahead. Also riding "up front" will be Vice President John Conron of Santa Fe, Secretary-Treasurer Richard Waggoner of Roswell and Directors Bob Campbell and Jess Holmes (Albuquerque), Urban Weidner and Ted Luna (Santa Fe) and Charlie Nolan (Alamagordo) and Kern Smith (Carlsbad). Congratulations to them all!

#### TAKE ME TO YOUR LEADER

#### idaho



LeRoy R. Taylor, President Consulting Engineers/Idaho

On February 2 when Idaho Consulting Engineers meet with their friends and colleagues for the Annual Convention with the Idaho Society of Professional Engineers — LeRoy R. Taylor of Boise, Idaho, will move into the driver's seat for 1973-'74. He will be ably aided and abetted by First Vice President Richard T. Kanemasu; Second V. P. Larry V. Perkins; Secretary-Treasurer Shirly J. Ross and by Director John L. Hoffmann with John J. Straubhar serving as Alternate Director.

Fearless leader Taylor was born, he states, "some time ago" in Iowa where he attended high school. He received his B. S. in Civil Engineering from Oregon State University which was swiftly followed by three years in Uncle's Navy.

He joined the firm of CH2M/Hill in 1956. (Mebbe we'd better explain that name which is not a formula but stands for Cornell, Howland, Hayes & Merryfield). Mr. Taylor is currently serving as Project Manager for general civil projects in the Boise Regional Office of this firm of Engineers/Planners and Economists.

The Taylor family consists of LeRoy's wife, Velma, and two youngsters — Stacy, who is 9, and Scott, aged 7. On a more personal note to Editorial Board Member John Hoffmann, Mr. Taylor writes — "My bad habits include flying, skiing, fishing, hunting and camping." Leave out the skiing (not for elderly editors) and they all sound like fun to us!

Have a good year, Mr. T.!

#### COLORADO A.G.C. MEETS



Saul Horowitz

The Annual Meeting of Associated General Contractors of Colorado, Building Chapter, Inc. (AGC/C) will be held on Friday and Saturday, February 2 and 3, 1973, at the Denver Hilton Hotel, followed by the Annual Dinner-Dance on Saturday, February 3 at The Regency Inn.

Joining with the Colorado Contractors Association (CCA), the heavy, highway and utility chapter of AGC, for the Intra-Industry Luncheon on Friday at noon for refreshments and 12:45 p.m. for lunch, the combined groups will hear Vice President Saul Horowitz of the Associated General Contractors of America and Chairman of the Board

of HRH Construction Corporation of New York City, which specializes in highrise buildings. He will also speak to the general contractor members of the combined chapters on Saturday at a noon luncheon.

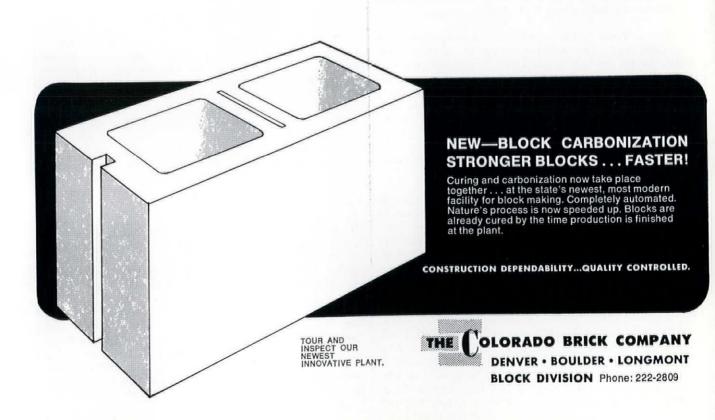
Mr. Horowitz has been a member of the AGC Board of Directors since 1965, holding a number of important committee assignments since that time, and in 1971 was chairman of the Building Division of the AGC. A graduate of the U. S. Military Academy in 1946, he also attended Phillips Academy and Yale University.

The remainder of the two-day Annual Meeting will be devoted to the business of the AGC/C and CCA separately, but both in the Denver Hilton Hotel. Matters to be discussed in the AGC/C Sessions will include labor relations, manpower and training, education, construction safety, construction markets, industry relations and public relations.

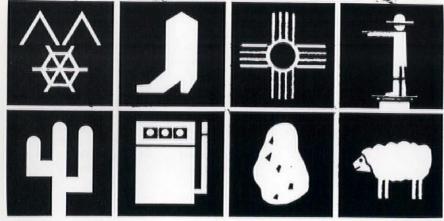
New officers for both organizations will also be elected at this time. More anon on the deliberations of these groups who speak loud and clear in the Construction community.

#### KUDOS

Congrats, laurels and all that jazz to the intrepid Denver Chapter of the Construction Specifications Institute for their good work. President Jack Kruse has announced that the Division of Public Works/State of Colorado has established criteria stating that architects doing work for the State must conform to the CSI Format.



#### symposia/around the region





#### Cook Inlet Looks Ahead

Thanks to Bob Besek, Ye Ed of the "inlet outlet", we have a tentative schedule of events for the C.S.I. programs to come up in Northern Lights Territory. Following the January program on "Insurance and Bonding". the C.S.I.'ers (good men and true) will discuss "Roof Systems" in February and "Concrete/Specifying and Control" in March, Come April there will be a Seminar on "Foundation Engineering" which should be a dandy in the Land of Perma-frost. The Chapter will take another look at "OSHA" in May (we don't wanna but we gotta) and in June they will talk about "Tile Work-Specifying and Problems" . . . which sounds like a "natural" for Friend Tom Keeton. Come July, CSI Cook Inlet will wonder about "Educating Specifications Writers: How?". The August meeting zeros in on "Specifying Hardware" and in September there will be a full line-up to play the "Construction Bidding Game."

It would certainly seem that Program Chairman Leo D. McGlothlin has done a great job in lining up a series of presentations which should be of interest and importance to every member of the Industry in Alaska, Have a laurel, Leo!

#### arizona

#### A.S.R.I. in Tucson

We are a tad tardy in reporting this one — but it is such a great program it is certainly deserving coverage. It is, of course, the excellent Architectural Sales Representatives Institute conducted in cooperation with the College of Architecture at the University of Arizona in Tucson in mid-November. Designed to focus on the particular problem areas of the construction product sales representa-

tive, this Institute which is presented periodically by Producers' Council, is a unique advanced training course for the building-product consultant. There were a host of excellent speakers from all areas of the Industry and Dean Bob McConnell made an excellent slide presentation on the relationship of architecture and manufacturing technology — and man and his environment.

The PC Institute program has long been a much-needed link between architect, engineer, contractor and producer. It serves to make the man representing the "tools of construction" a real member of the "building team".

#### January Equals Grassroots!

We cannot report, of course, on the full particulars of the 1973 Grassroots/AIA meeting held January 22-24 at Mountain Shadows in Phoenix, but the schedule would indicate a busy and informative meeting for not only new component presidents and presidents-elect, but other interested professionals. Grassroots was initiated to provide a two-way communications medium between local and national aspects of the American Institute of Architects putting "grassroots" input into the Institute's programs and proposals for the year ahead.

Of particular interest to the members of the host (Central Arizona Chapter) architects was the banquet held on January 23 when S. Scott Ferebee, national AIA prexy installed their new officers and appeared in the role of Principal Speaker, Serving the CAC in 1973 -President Jerry Clark, President-Elect George Sprinkle, Secretary Tom Zimmerman and Treasurer Mike Goodwin. The Directors this year are Craig Walling, Jim Rapp and immediate-past-president Dwight Busby.



Meet Mary Anne Blish of Denver, one of eleven students to receive scholarship awards from the AGC of Colorado/Building Chapter, Mary Ann has an outstanding scholastic record, works some 35 hours a week and has been a research engineer on a National Science Foundation project. She is enrolled in civil engineering at Denver University's College of Environmental Engineering, Paul Penner. Chairman of the Scholarship Committee, announced that almost \$6,000 has been awarded to the eleven students at Colorado colleges through the Construction Advancement Program, administered by AGC/C.

Special bus tours were arranged for the occasion including a tour/luncheon/shopping spree to Carefree for the Ladies; a Taliesin Tour and on January 25, the Chapter sponsored a visit to Arcosanti, the City of the Future, designed by Paolo Soleri and under construction near Cordes Junction. The continuing education seminar on "Selling Architectural Services" followed the Grassroots gathering on January 26-27.

#### colorado

#### CCC/AIA Mountain Bound!

Just a cursory glance at the scheduled meetings for 1973 as outlined in "addenda" indicates that members of Colorado's Central Chapter/A.I.A. are heading for the high country. For instance on March 2-3 there will be a Ski Meet at Steamboat Village Inn and Schussboomers of the World Unite - skiing in Colorado this winter is not just good - it's grrrreat! Come July, the CCC will head for Aspen where the meeting will mesh nicely with the International Design Conference then in session. It will all reach a pinnacle of success with the Western Mountain Regional Conference (Number #22) to be held in beautiful Estes Park. Well, if you

live in Rocky Mountain Country — might as well enjoy it!

#### **Energy Education!**

After sweeping polar bears off our front stoop this Winter . . . everybody in Colorado and environs is interested in learning how to conserve our energy resources. Nobody is working at it any harder than CIG who reports the following. . . .

Over 80 professional engineers and building superintendents were briefed on dual-fuel burning systems recently in an effort by Colorado Interstate Gas to expose concerned personnel to the latest methods in utilization of energy and obtaining maximum benefit from various fuels. Sponsored by CIG's Marketing Division, the briefing was part of the Company's continuing program to provide consumers with the most up-to-date information on how to conserve natural resources and save money.

Lou Schumaker, Systems Application Engineer for the Hayes Republic Corporation of Indiana, spoke on proper controls for dual-fuel burners, illustrating his talk with technical illustrations and diagrams. Wayne Walters, Assistant Buildings and Grounds Manager for the Colorado State Hospital in Pueblo, followed with a talk on the new dual-fuel boiler burners and controls recently installed at the hospital.

The meeting in Denver was attended by engineers and building superintendents representing major institutions, industrial complexes, and consulting engineering firms. The CIG programs are designed to provide fresh concepts, new ideas and the latest technological advances to engineers to assure that they are aware of ways to obtain the fullest energy use from the fuel they use in their particular system.

#### A "Jim Dandy"!

Harold Van Gordon, who doubles in brass for the Denver Chapter of Producers' Council — that is to say he is both Secretary and Editor of Mile Hi-PC News — reports that the Decision Makers meeting on December 19 was a "Jim Dandy". We would quickly agree since a turnout of 225 of those all-important people was on hand to view 21 exhibits. Randy Lara and crew are receiving laurels for this one!

Events in January included another BIG one — the January 17 luncheon for members of the A.I.A. in the Crown Jewel Room at the Albany. It

is a "yet-to-come" because of our deadlines, but George Stoner, who is in charge, assures us it will be one of the highlights of a fabulous P.C. year.

Mr. John W. Bowersox, who serves as Executive Vice President for Producers' Council, has been "on Tour." He visited in Phoenix in early January and met with officers of the Denver Chapter on January 10. He should have been most impressed with PC on this side of the Big Muddy — the fellas do a great job!

#### Richardson Elected

The very personable Lee Richardson, now in his fourth year on the Board of Directors, has been elected President of W.O.O.D., Inc. Lee has long been active in the organization devoted to promoting this segment of

the Industry having a prior Boardy term from 1968-'71, and then reappointed last year to fill out the term of transferred Dan Larson. Lee and his father (Don) are the Men in Charge at Richardson Lumber headquartered in Denver.

Other officers elected were Ralph Bacheldor (General Services) as First Vice President; Dan Green (Reed Mill and Lumber), Second Vice President; Pete Click (Click Lumber) as Treasurer and the Secretary is Bill Grimm (R. W. Specialties). Pete, Bill and Dan were all recently elected to the Board, and John Kell (U. S. Plywood) has been re-appointed to another one year term. Incidentally, Dan Green was presented with the annual Paul Bunyan Award which is given to the lumberman contributing the most to the betterment of the Industry.

#### Idaho Engineers Annual Convention

Our appreciation to Editorial Board Member, John Hoffmann of Boise for the information which lets us all look ahead to the excellent agenda on tap for the 1973 Annual meeting of the Idaho Society of Professional Engineers and the Consulting Engineers/Idaho. It all takes place on February 1-2 and 3 at the Rodeway Inn in Boise with the theme—"Engineering—A Better Environment Through Technology."

Following ISPE and CEI Board meetings on Thursday, February 1, Ernie Day will speak at the kick-off luncheon. Mr. Day, a Boise realtor, is a prominent conservationist serving as Regional Director for the National Wildlife Federation. He is a Past Chairman of the Idaho Parks Board and was named Idaho Conservationist of the Year in 1969. Mr. Day will discuss problems involving the engineer and our environment in a presentation titled—"Part of the Problem, Part of the Solution."

Two members of the Geology Department at Boise State College are on the Thursday afternoon agenda. Dr. Mont M. Warner and Dr. Clayton R. Nichols—both with extensive experience in industry and as consulting geologists will explore the "Geothermal Energy Potential of Idaho and Its Engineering Implications." Thursday evening is "Fun Night" with a Pizza Party at the "Grizzly Bear."

Senator Frank Church will be the keynote luncheon speaker on Friday. As a member of the Senate Interior Committee, Senator Church has devoted a major effort to safeguarding Idaho's and the nation's environment against the ravages of mismanagement and waste.

In the afternoon Mr. Robert O'Connor, Vice President-Administration for Idaho Power Company, will discuss "The Energy Crisis." Mr. O'Connor has an excellent background in electrical engineering and power and is well qualified to speak on this subject. Mr. Eugene K. Peterson, Department of the Interior and Chairman of the Pacific Northwest River Basins Commission's Urban and Rural Related Lands Committee, will also address the membership Friday afternoon, Mr. Peterson will present a slide summary of the Committee report entitled "Ecology and the Economy." This will be an enlightening discussion concerning the long term relationships between resources, population, industry and liveability in the Northwest.

Dr. Richard E. Warner, Professor of Engineering at the University of Idaho, will speak at the Saturday Young Engineers' Breakfast. His topic will be "Career Genocide—The Case for Continuing Education" which should be of interest to all engineers, young and old alike.

The Founders Society Luncheon Saturday will be addressed by James F. Shivler, Jr., NSPE President. His experiences in the National Society affairs and private practice should make this luncheon presentation outstanding.

In addition to the excellent program, there will be the usual supplier displays and the meetings devoted to "strictly business." A Ladies Luncheon has been scheduled for Friday, February 2nd.

Always a meeting of interest, this 63rd Annual Convention for the ISPE looks very much like another winner!

#### Annual Meeting for A.I.A.

Prior to passing out the "posies" to the winners in their bi-annual Design Awards program — members of the Idaho Chapter of the American Institute of Architects in meeting assembled transacted all important business of the day. Included was a committee report from Bob Hamill (our AIA Man in Idaho) on State, Chapter and Section Organization, a Chapter Study on OSHA Requirements and a report on the Human Resources Council.

Section Officers for 1973 are: Northern Section—William Shisler, President; William Sloan, Vice President, and Richard Salsbury, Secretary-Treasurer. The Central Section officers are President, Tom Wilson; Vice President, Victor Hosford; and Secretary-Treasurer, Bradford Shaw. In the Eastern Section, Harald Gerber will serve as President; Tom Myers as Vice-President, and William Vaughn will be Secretary-Treasurer.

It was also announced that Glen E. Cline has been named to the national AIA Committee on Office Practice, and Tom M. Wilson to the Committee on Housing.

It is our hope that we can tell you "all about", the Idaho Chapter's "fearless leader," Harold G. Thomp-

#### IDAHO ARCHITECT IS HONORED



The Annual Award of Merit by the Intermountain Chapter of Producers' Council was presented to Boise architect Neal H. Smull on November 20. Shown above, (left to right) Van B. Bruner, speaker at the presentation and vice president of the American Institute of Architects; Mrs. Smull; Mr. Neal Smull, AIA and Producers' Council President, Jerry Howells. The Award is presented each year for community involvement, high professional integrity and efforts to further the cooperative programs of AIA and PC.

Mr. Smull is a past president of the Idaho Chapter, a member of the Idaho State Board of Architectural Examiners and governor of the Utah-Idaho District of Kiwanis International. He is a principal in the architectural and planning firm of Cline, Smull, Hamill and Associates.

son and his cohorts soon in the usual way . . . "Take Me To Your Leader" f'rinstance.

#### montana

#### A Family Affair

The Colonial Motor Inn in Helena will provide the setting for the February 2 and 3 meeting of Montana's Architects and Engineers — purpose; an in-depth examination of "The De-

sign Professional and Government". Participating in this "Big Winter" conclave will be members of the American Society of Civil Engineers, the Montana Society of Engineers, the Consulting Engineers Council of Montana, the Montana Chapter of the American Institute of Architects, the Montana Association of Registered Land Surveyors and the Idaho/Montana Chapter of the American Society of Landscape Architects.



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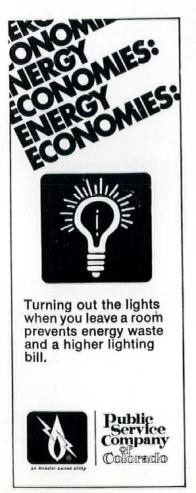
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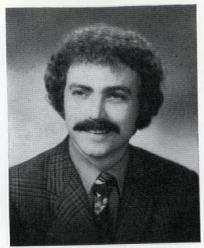
(303) 232-3571

Lakewood, Colorado 80214

Registration will open at noon of Friday, February 2 with Board Meetings scheduled for the various state societies at 2:00 p.m. There will be a Reception for Legislators in the evening. At 9:00 the following morning State Societies will hold their business meetings and will meet with their wives for luncheon at noon. The guest speaker is Richard Bostwick, attorney, from Casper, Wyoming, Mr. Bostwick is no stranger to Symposia readers — a principal speaker at the WMR/AIA Conference at Jackson Lake Lodge in 1971, his excellent paper on the "Liability of Architects and Engineers" appeared in the January and February, 1972 issues of the magazine.

Joining Mr. Bostwick for the afternoon Panel at 2:00 p.m. will be David
Auld, Account Executive with the
firm of Victor Schinnerer and Company, Washington, D. C. While the
professionals acquire the "smarts",
a special program for the Ladies has
been scheduled. There will also be
an opportunity to view exhibits from
suppliers. The Happy Hour on Saturday evening will begin at 7:00 and
the Banquet speaker is Robert Ross
who is billed as an expert on "Country Plumbing"... a most provoca-





Above — Gale Clemenson who has been appointed Secretary with primary responsibility in Design and Planning by the architecture/engineering/planning firm of Annand-Boone and Associates, a Professional Corporation, in Portland, Oregon. Mr. Clemenson has been with the firm since 1956, receiving his Architects Registration for Oregon in 1970.

tive topic. Tripping the light fantastic will conclude the evening. They do things BIG in Big Sky Country which means nobody should miss "The Design Professional and Government" in Helena come February!

#### new mexico

#### Ryan Elected

Thomas P. Ryan who is the immediate past president of the New Mexico Building Branch of the Associated General Contractors has a new "fearless leader" job in the year ahead. He has been elected Vice President of the Greater Albuquerque Chamber of Commerce which means (don't they always say, if precedent serves?) he will take over the Big Job come 1974. Tom has long been active in community affairs, heading up the GC section in the construction division for the Albuquerque United Community Fund Drive in 1972, as an active member of the board of Rotary and as the current chairman of the AGC Manpower and Training Committee for the New Mexico Building Branch. He is also a member of the national AGC Manpower Committee.

Tom can certainly look back on his 1972 term of office for the New Mexico Building Branch with great pride. During his tenure the association enjoyed its greatest period of membership growth . . . enough to win the Cashman Trophy, the national award presented annually to the AGC chapter with the largest percentage increase in members.

The C. of C. of Greater Albuquerque has picked a winner!

#### Southern Chapter/AIA Leaders!

Editorial Board member Joe Boehning, AIA, who contributes so significantly to our coverage of activity/ New Mexico style has given us the late-late news on elections in the Southern Chapter/AIA. The new president is Kern Smith of Carlsbad (and may this serve to nudge this fella for his picture and "life and times") -Vice President is Will Harris of Hobbs and Joel Scott of Alamagordo will serve as Secretary-Treasurer. The Directors this time around are Richard Waggoner of Roswell and immediate past president of the New Mexico Society, Charlie Noland of Alamagordo.

#### oregon



President DeNorval Unthank

#### Southwestern Chapter/AIA

Paul Edlund, our "other" man in Oregon (or is it the other way around?) is getting in gear with Symposia coverage of the recent election of "fearless" fellas for the Southwestern (based in Eugene) Chapter of the A.I.A. The 1973 Man with the Gavel is DeNorval Unthank being ably assisted by Vice President Jon Berry, Secretary Wilmot Gilland and Treasurer Leonard Forjen. The Director's shoes slip neatly on the feet of Donald Driscoll with Mike Schellenbarger as Associate Director. Delegate to the Oregon Council of Architects is Alan G. Seder and, of course, retiring President Charles Endicott will carry on.

Paul notes that President Unthank is a partner in Unthank, Seder and Poticha and that both Gilland and Schellenbarger are on the staff at the University of Oregon. The balance of the elected "ticket" is in private practice.



Here some "fearless leaders" get together . . . left to right: Joe Ashworth, immediate Past President of the Utah Chapter/AIA; Archibald Rogers, President-Elect of the National Institute; E. J. "Jake" Garn, Salt Lake City Mayor and newly elected President of Utah's AIA, Ralph F. Evans. Of course, they are talking about the future of architecture in America. Other Utah officers for 1973 are President-Elect, David R. Hayes; Secretary Boyd A. Blackner; Treasurer William W. Louie and Directors Joseph Ashworth, Burtch Beall, Jr. and Jerrold Anderson.

#### utah

#### Dollars and Sense!

The January 11 Dinner meeting of the Utah Chapter/A.I.A. was held in the Exhibit Hall at the Department of Architecture/University of Utah — and a most informative gathering it was. The Panel Discussion topic was "The New Client: Funding Development" and featured three outstanding members of the financial community. Architects heard from Howard C. Bradshaw, Executive Vice President/American Savings and Loan; John W. Cooper, President/Tracy Mortgage Company and Franklin D.

Richards, Jr., Vice President of Home Benefit Savings and Loan.

The in-depth forum explored the role of Architects as Developers, limited partnerships, real estate trusts and many of the other "new client" situations on the horizon for the design professional. In addition to the stimulating discussion, new officers of the Chapter were installed.

No meeting in February for U/AIA! It's all fun and games on February 10 when architects will meet with the Women's Architectural League for a PARTY. And we do mean that in

upper case. The ladies have planned indoor swimming, a horsedrawn sleigh, ice skating, bobsledding, to-bogganing and dinner. All of this at the Homestead! We're sure nobody is going to miss this one — a wowser!

#### washington

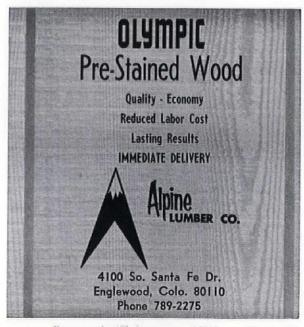
#### Bishop and Crystal Ball

Walt Bishop, our man in Washington — and incidentally Region 12 Director for the Construction Specifications Institute, has been good enough to look into the future for us. Lots of exciting events are promised up in beautiful Northwest territory. For example:

In April, the Puget Sound Chapter will sponsor a Construction Management Seminar. This will be an indepth affair and held on five consecutive Monday nights at the University of Washington. CSI Elections are coming up and two very important jobs are about to have "new management" in 1973. There will be a new Regional Director in 12 (replacing Walt) and a new Southwest Section Director (replacing Tom Keeton).

And you better believe Portland is going to be busy with Competitions/ Conferences and Conventions. This energetic group will host the Region 12 Conference this autumn, and in 1974 will take on "the whole thing" when the National Convention will zero in on "the city of the roses". Since Portland has this job for 1974 - it will be their job this year to judge the 1973 CSI Specifications Competition. All of this and more will be forthcoming from Walter and colleagues for publication in Symposia. Thanks for the peek into your crystal ball, Walter!







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The Annual CEC/AIA Public Affairs Conference for 1973 has been scheduled for March 19-20 at the Mayflower Hotel, Washington, D.C. This is the sixth time around for this important meeting.

An evening of gaiety and merriment was enjoyed "just afore Christmas" at the Western Forestry Center by Portland members of the A.I.A.

Any CSI member trying to enlist a General Contractor member should have a copy of "A General Contractor Looks at CSI" . . . it appeared in the January Denver "Scope", written by T. A. Weber, PE with the Wilkins Company, Inc.

Members of the Central Arizona Chapter/AIA will give themselves a breather after hosting Grassroots and the January 26/27 Seminar on "Selling Architectural Services". No regular meeting in February.

The Albuquerque Chapter/CSI has changed its meeting place. In January they were at the Sundowner — and, of course, the February meeting will be postponed by the Region 10 Conference. But — be alert! They're looking around again!

Colorado's Architectural Secretaries heard from Ed DeVilbiss on January

9 when he spoke on "The Licensing/ Registration Procedures of the State of Colorado."

Associated General Contractors in Utah held their annual meeting on January 26-27 at the Hotel Utah in Salt Lake City.

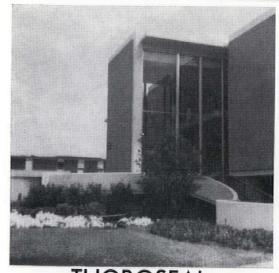
Walt Bishop discovered a new libation at the Region 12 CSI Conference — it's called a Freddy Fuddpucker. If you're curious (as we were) about its exotic ingredients, Board Member Bishop informs us . . "A Freddy Fuddpucker is a Harvey Wallbanger with a little tequila floated on top. Try it, you'll like it!"

Up in JPB Country the Board of Architectural Examiners has become the Board of Architects and is now located in the Department of Professional and Occupational Licensing, Lalonde Building in Helena — 59601. Ed Carney is the Director.

The Rocky Mountain Center on Environment (ROMCOE) will hold their Third Award Dinner on February 8 at the Denver Hilton. W. R. Goodwin, Dinner Chairman and President of J-M, notes over a thousand guests are expected. At 150 bucks a couple, Mr. Goodwin? Tch tch — environment IS expensive.

Back from "Fun City" - Wyoming's
Jerry Deines reports that he and
pretty wife Shirley had a great
time . . "I don't think there is
anything you cannot do in
New York," he comments - "We
heartily recommend it as a place to
visit, but. . ."
Our sentiments exactly, Mr. D.

Whaddya mean . . . "Fight No More Forever"? The difference of opinion between Bob Wilmsen and Paul Rader continues — this time, reprinted in the Phoenix CSI "Cactus Comments". Nothing like a little controversy to stir up interest!



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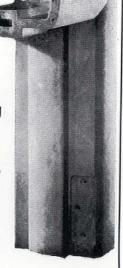
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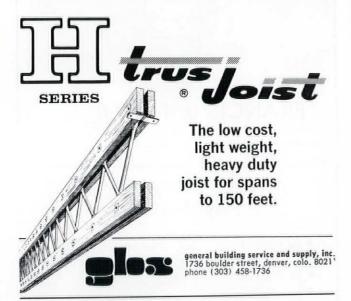
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Mayhem? Maybe! The Puget Sound CSI Chapter brought together a covey of representatives from all segments of the Industry to (we hope verbally) beat each about the head and shoulders on January 16. The title of the (fight) discussion was "What's Wrong With That Guy!" — Engineer Bob Laney (refereed) moderated.

Bernie Friedman, Earl Chann and Jim Merry all participated actively in the January 3 meeting of the Southern Arizona Chapter/AIA. Three different types of projects were discussed showing "The Architect As A Developer".

Chapter Presidents in CSI Region 12 will meet in Portland on February 7. The Portland Chapter will host the "fearless leaders" with Past President John Crook in charge of arrangements and serving as moderator.

A "money-talk" seminar on the economics of apartment planning and construction will be held at the Four Seasons in Albuquerque on February 6. Further info can be obtained from Ken Hansen, Portland Cement Association in Denver or from concrete and concrete products manufacturers in New Mexico.

CEC/Colorado has a newly-revised "Manual of Professional Practice for Interprofessional Service of Mechanical and Electrical Engineering" - just \$1.00 from the Consulting Engineers Council, 995 South Clermont, Denver - 80222

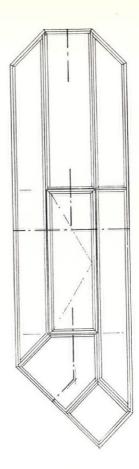
#### capsule comment

Thanks to Ann Boyden for remembering that most quotable quote from Mark Twain—and including it in Utah's AIA Newsletter. Commented Mr. Twain . . .

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